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Assessment of Earthquake Damage
in Mexico City

The September earthquakes delivered a heavy blow to Mexico's already weakened economy. Although the epicenter was located on the Pacific coast about 250 miles from the capital, most of the damage was concentrated in downtown Mexico City. Government office buildings were particularly hard hit, as were hotels catering to the important tourist industry. Our rough estimate is that the overall cost of repairing or replacing destroyed and damaged buildings would be about US \$2.5 billion. This is a very crude figure based on some rough assumptions on labor and material costs and the total square footage of damaged and destroyed structures. The figure of US\$50 per square foot was used as a multiplier. This rough estimate of reconstruction does not include the cost of replacing equipment, furnishings, or interior decorations; nor does it include the cost of damage and destruction to individual homes and small apartment buildings.

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UNCLASSIFIED

To better understand the range of destruction in Mexico City, the country's administrative and economic center and one of the world's largest urban concentrations, we have grouped the affected buildings into six categories:

- ° government office buildings
- ° hotels
- ° commercial and industrial buildings
- ° residential buildings
- ° hospitals and clinics
- ° utility buildings.

HOTELS

The tourist industry is a key sector of the Mexican economy. Apart from the negative psychological impact of the earthquake on tourism, consideration must also be given to the time and expense of repairing hotel and restaurant facilities destroyed in the disaster.

Large hotels suffering damage:

- ° 1. Hotel Alameda; 345 rooms; evacuated
- ° 2. Hotel Casa Blanca; 268 rooms; structural damage
- ° 3. Hotel Continental; 342 rooms; structural damage
- ° 4. Hotel De Carlo; 100 rooms; heavy damage
- ° 5. Hotel Del Angel; structural damage
- ° 6. Hotel Del Prado; 520 rooms; structural damage
- ° 7. Hotel El Presidente; 128 rooms; heavy damage

- 8. Hotel El Romano; 154 rooms; destroyed
- 9. Hotel Guadalupe; 119 rooms; heavy damage
- 10. Hotel Principado; 150 rooms; destroyed
- 11. Hotel Regis; 331 rooms, destroyed
- 12. Hotel Romano Diana; 168 rooms; destroyed
- 13. Hotel Versailles; destroyed

Hotels not located on the map:

- Hotel Finisterre; 115 rooms; destroyed
- Hotel Jardines de Churubusco; structural damage
- Hotel Montreal; 91 rooms; destroyed

COMMERCIAL AND INDUSTRIAL BUILDINGS

Mexico City's commercial sector emerged in remarkably good shape from the earthquake. Many large office buildings, such as the 44-story Latin American Tower, suffered no reported damage. Several clothing factories, however, were destroyed, resulting in a great loss of life.

Major commercial buildings suffering damage:

- 14. Televisa; studies and offices; destroyed
- 15. Banco International; destroyed
- 16. Phillips Mexicano; destroyed
- 17. Central Plaza Office Building; destroyed
- 18. Sears; large downtown store; heavy damage
- 19. Office Building on Turin; 7 stories; destroyed

- 20. Pino Suarez; two of four 22-story towers; destroyed
- 21. Clothing Factories; eight garment plants employing 600 seamstresses; destroyed

Buildings not located on the map:

- BANAMEX; central bank; destroyed
- Edificio Basauro

RESIDENTIAL BUILDINGS

Mexico City is a sprawling metropolis covering much of the Valley of Mexico. Many of its 17 million residents live in poor squatter communities around its periphery. These areas suffered little. On the other hand, many large apartment buildings in downtown Mexico City, such as those of the Tlatelolco public housing complex, were destroyed. These apartment towers housed middle and upper middle class people; their destruction and the plight of the former residents are viewed with special concern by the Mexican Government.

Major residential buildings suffering damage:

- ° 22. Nuevo Leon Apartments; Tlatelolco Public Housing Complex; 14-story structure; destroyed
- ° 23. Benito Juarez Highrise Apartments; 380 units; destroyed
- ° 24. Residences and Apartments; destroyed

Buildings not located on the map:

- ° Two Apartment Buildings in Colonia Postal; destroyed

GOVERNMENT OFFICE BUILDINGS

Many buildings were destroyed outright or so severely damaged that they will have to be torn down. The loss of headquarters facilities and basic records seriously weakens the country's institutional structure and not only hampers reconstruction activities but renders decision making exceedingly difficult in the highly centralized and bureaucratic Mexican system.

Key government buildings suffering damage:

- ° 25. Ministry of Public Works, communications, & Transportation; multistory complex of structures; destroyed
- ° 26. Ministry of Agriculture & Water Resources; destroyed
- ° 27. Ministry of Commerce & Industrial Development (SECOFIN); destroyed
- ° 28. Subministry of Commerce; destroyed
- ° 29. Ministry of Navy Archives & classroom; destroyed
- ° 30. Ministry of Budget (SPP); destroyed
- ° 31. Office of the Attorney for Consumer Affairs; destroyed
- ° 32. Office of the Attorney for the D. F.; multistory cement & steel structure; destroyed
- ° 33. Office of the Attorney General for the Republic; destroyed
- ° 34. Federal District Treasury Department; destroyed

- 35. Ministry of Finance & Public Credit (SHCP);
destroyed
- 36. National Development Bank (NAFINSA); destroyed
- 37. Ministry of Labor & Welfare; destroyed

Buildings not located on the map:

- Camara Nacional de Comercio; destroyed
- UNAM rectoria; slight damage
- State Technical School; destroyed
- Public School No. 3; destroyed

HOSPITALS AND CLINICS.

Downtown Mexico City has a large number of medical facilities, and many suffered damage. Some, including the city's largest hospital, were completely destroyed. Replacing and repairing hospitals together with their expensive medical equipment will be one of the more costly aspects of reconstruction. This assessment addresses only the structural costs.

Key hospitals and clinics suffering damage:

- ° 38. General Hospital; eight of nine buildings, including the 7-story gynecology-obstetrics wing; destroyed
- ° 39. Central Surgical Hospital; destroyed
- ° 40. Government Clinic; destroyed
- ° 41. Hospital Juarez; 12-story building with 400 beds; destroyed

Buildings not located on the map:

- ° Hospital St. Elena; destroyed
- ° IMSS Building; destroyed

UTILITIES

It may take months to fully assess the damage to Mexico City's antiquated water supply system, which has expanded in a haphazard manner since the colonial era. Many neighborhoods otherwise unaffected by the earthquake report a lack of water. Damage to certain utility structures, particularly telephone exchange buildings and government offices involved in water, sewer, and gas services will slow utility restoration. Water services may be affected for months.

Major utility facilities suffering damage:

- ° 42. Telephones
- ° 43. Telephones
- ° 44. Long Distance telephones

Structures by Ownership

1. Hotel Alameda	Private
2. Hotel Casa Blanca	Private
3. Hotel Continental	Private
4. Hotel De Carlo	Private
5. Hotel Del Angel	Private
6. Hotel Del Prado	Private
7. Hotel El Presidente	Private
8. Hotel El Romano	Private
9. Hotel Guadalupe	Private
10. Hotel Principado	Private
11. Hotel Regis	Private
12. Hotel Romano Diana	Private
13. Hotel Versailles	Private
14. Televisa	Government
15. Banco International	Private
16. Phillips Mexicano	?
17. Central Plaza Office Building	?
18. Sears	Private
19. Office Building	?
20. Pino Suarez	?
21. Clothing Factories	Private
22. Nuevo Leon Apartment Building	Government
23. Benito Juarez Highrise Apartment	Government
24. Residents & Apartments	Private ?
25. Ministry of Public Works,	

Communications & Transportation	Government
26. Ministry of Agriculture & Water Resources	Government
27. Ministry of Commerce & Industrial Development (SECOFIN)	Government
28. Subministry of Commerce	Government
29. Ministry of Navy Archives & classroom	Government
30. Ministry of Budget (SPP)	Government
31. Office of the Attorney for Consumer Affairs	Government
32. Office of the Attorney for the D. F.	Government
33. Office of the Attorney General for the Republic	Government
34. Federal District Treasury Department	Government
35. Ministry of Finance & Public Credit (SHCP)	Government
36. National Development Bank (NAFINSA)	Government
37. Ministry of Labor & Welfare	Government
38. General Hospital	Government
39. Central Surgical Hospital	Government
40. Government Clinic	Government
41. Hospital Juarez	Government
42. Telephones	Government
43. Telephones	Government
44. Long Distance Telephones	Government

Buildings Not Located on the Map

Hotel Finisterre	Private
Hotel Jardines de Churubusco	Private
Hotel Montreal	Private
BANAMEX	Government
Edificio Basauro	?
Two Apartment Buildings in Colonia Postal	?
Camara Nacional de Comercio	Government
UNAM rectoria	Government
Hospital St. Elena	?
IMSS Building	Government
State Technical School	Government
Public School No. 3	Government

Central Mexico

